ZOTAC ZBOX Blu-ray
User's Manual

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Every effort has been made to ensure that the contents of this manual are correct and up to date. However, the manufacturer makes no guarantee regarding the accuracy of its contents, and reserves the right to make changes without prior notice.

CAUTION:
Risk of explosion if the battery is replaced with an incorrect type. Batteries should be recycled where possible. Disposal of used batteries must be in accordance with local environmental regulations.

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Product specifications

Chipset
- Intel® NM10 Express

Product Dimensions
- 280mm x 187mm x 38mm (11.02in x 7.36in x 1.5in)

Onboard CPU
- Intel® Atom™ D525 (Dual-core, 1.8 GHz)
- Intel® Atom™ D510 (Dual-core, 1.66 GHz) (Optional)

Onboard graphics
- Next-Generation NVIDIA® ION GPU, CUDA cores up to 16
- Up to 512 MB of GDDR3 video memory
- Dual-link DVI-I & HDMI output (VGA compatible with adapter)
- Dual display ready
- Support up to 2560x1600 resolution
- Support Blu-ray 3D (via HDMI to 3DTV with PowerDVD 10)

Memory support
- Two 204-pin SO-DIMMs DDR3-800
- Up to 4 GB of memory

USB ports
- One USB 2.0 & one combo eSATA / USB 2.0 port (wake-on-USB supported)
- Two USB 3.0 ports

Storage support
- SATA 3.0 Gb/s transfer rates
- Supports one 2.5-inch SATA HDD or SSD (height limit: 9.5 mm)
- One combo eSATA / USB 2.0 port

Network support
- Gigabit (10/100/1000Mbps) LAN
- IEEE 802.3 compatible

WiFi
- 802.11b/g/n compatible
- Enhanced wireless security compatible

Audio
- 2-channel high-definition audio
- Jack-sensing compatible

Operating System support
- Microsoft Windows® XP, Windows® Vista and Windows 7
- 32-bit and 64-bit support

Green Function
- ACPI (Advanced Configuration and Power Interface) compatible

Bluray Combo Driver Support

- BD read compliant, max speed: 4X
- DVD read and write compliant, max speed: 8X
- CD read and write compliant, max speed: 24X
- Supports 8cm & 12cm diameter
- Supports SMART-X (Smart Monitoring & Adjusting Read-speed Technology for eXtraction) and Seamless Link® (Smart Monitoring & Adapting Recording Technology for Burning) function

Safety information

Your ZOTAC ZBOX is designed and tested to meet the latest standards of safety for information technology equipment. However, to ensure your safety, it is important that you read the following safety instructions.

Setting up your system

- ❖ Read and follow all instructions in the documentation before you operate your system.
- ❖ Do not use this product near water or a heat source such as a radiator.
- ❖ Set up the system on a stable surface with the provided stand. Never use the system alone without the stand.
- ❖ Openings on the chassis are for ventilation. Do not block or cover these openings. Make sure you leave plenty of space around the system for ventilation. Never insert objects of any kind into the ventilation openings.
- ❖ Use this product in environments with ambient temperatures between 0℃ and 35℃.

✌ If you use an extension cord, please use the UL listed cord and make sure that the total ampere rating of the devices plugged into the extension cord does not exceed its ampere rating.

Care during use

- ❖ Do not walk on the power cord or allow anything to rest on it.
- ❖ Do not spill water or any other liquids on your system.
- ❖ When the system is turned off, a small amount of electrical current still flows. Always unplug all power, modem, and network cables from the power outlets before cleaning the system.
- ❖ If you encounter the following technical problems with the product, unplug the power cord and contact a qualified service technician or your retailer.
  - ➢ The power cord or plug is damaged.
  - ➢ Liquid has been spilled into the system.
  - ➢ The system does not function properly even if you follow the operating instructions.
  - ➢ The system was dropped or the cabinet is damaged.
  - ➢ The system performance changes.

Welcome

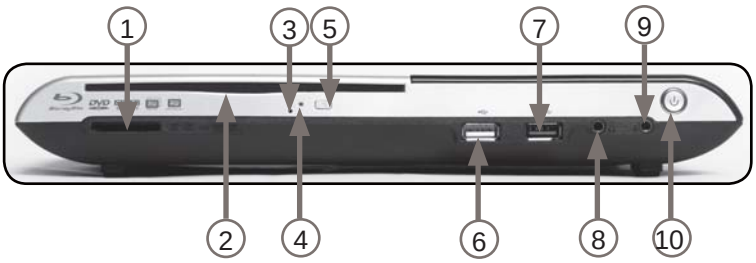
Congratulations on your purchase of the ZOTAC ZBOX Blu-ray mini-PC. The following illustration displays the package contents of your new ZOTAC ZBOX Blu-ray. Please contact your retailer If any of the below items are damaged or missed.

Package contents

- 1 x ZOTAC ZBOX Blu-ray mini-PC
- 1 x ZOTAC VESA mount
- 4 x Mount screws
- 1 x AC Adapter
- 1 x Power Cord
- 1 x User Manual
- 1 x Quick Start Guide
- 1 x Support CD
- 1 x DVI-to-VGA adapter

Getting to know your ZOTAC ZBOX Blu-ray

Front view



Refer to the diagram below to identify the components on this side of the system

1. 6-in-1 Memory card slot
The built-in memory card reader reads and writes MMC/SD/SDHC/MS/MS Pro/xD cards used in devices such as digital cameras, MP3 players, mobile phones and PDAs.

2. Optical drive
The optical drive is a slot-in type drive which supports compact discs (CD), digital video discs (DVD) and Blu-ray discs (BD).

3. Blu-ray drive emergency eject
Users can use a pin to insert into the Blu-ray drive emergency eject pin-hole to manually eject disc.

4. Optical drive activity indicator
The optical drive activity indicator shows when data is being transferred by the optical disk drive.

5. Optical drive eject button
The optical drive eject button ejects the disc from the optical drive.

6. USB 2.0 port
The USB (Universal Serial Bus) port is compatible with USB devices such as keyboards, mice, cameras and hard disk drives.

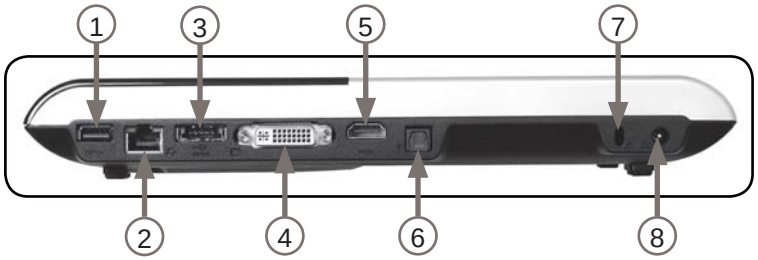
7. USB 3.0 port
The USB 3.0 port supports the SuperSpeed USB 3.0 devices and is backwards compatible with USB 2.0/1.1 devices. Use this port for USB 3.0 devices for maximum performance with USB 3.0 compatible devices.

8. Headphone/Audio output jack
The stereo headphone jack (3.5mm) is used to connect the system's audio out signal to analog headphones or amplified speakers.

9. Microphone jack
The microphone jack is designed to connect a microphone for video conferencing, voice narrations or simple audio recordings.

10. Power switch
The power switch turns the mini-PC ON and OFF.

Rear view



Refer to the diagram below to identify the components on this side of the system.

1. USB 3.0 port
The USB 3.0 port supports the SuperSpeed USB 3.0 devices and is backwards compatible with USB 2.0/1.1 devices. Use this port for USB 3.0 devices for maximum performance with USB 3.0 compatible devices

2. Ethernet port
The eight-pin RJ-45 LAN port supports standard Ethernet cable for connection to a local area network (LAN) with speeds of 10/100/1000Mbps.

3. Combo eSATA 3.0 Gb/s / USB 2.0 port
The combo eSATA 3.0 Gb/s / USB 2.0 port is compatible with eSATA devices such as external hard drives, Blu-ray drives, and USB 2.0 devices.

4. Dual-link DVI-I output
The dual-link DVI-I output supports digital displays with resolutions up to 2560x1600 and connection to analog VGA monitors with the included adapter (up to 2048x1536)

5. HDMI output
The HDMI (High Definition Multimedia Interface) output supports Full HD 1080p displays such as an HDTV or monitor.

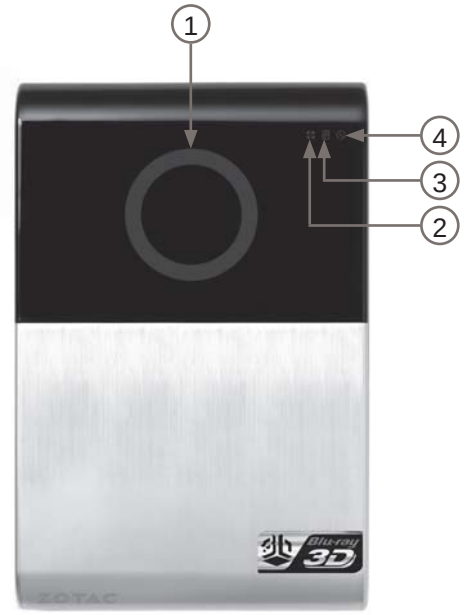
6. Optical S/PDIF output
The optical S/PDIF output enables connecting the ZOTAC ZBOX Blu-ray to digital audio receivers and speakers for crystal clear digital audio and surround sound from compatible soundtracks.

7. Safety lock
Connects to compatible Kensington Safety Locks.

8. Power input (DC19V)
The supplied power adapter converts AC power to DC power for use with this jack. Power supplied through this jack supplies power to the mini-PC. To prevent damage to the mini-PC, always use the supplied power adapter.

Note 1: The power adapter may become warm to hot when in use. Do not cover the adapter and keep it away from your body.
Note 2: Due to the special design for easy upgrade, some connectors are placed upside down.

LED indicator



LED indicator illustration

1. Blue Ring ( )

LED is on	System is on
LED is off	System is off
LED flashes slowly	System is in standby mode

Note: The blue ring LED can be disabled in BIOS setting. Refer to the next chapter for more details.

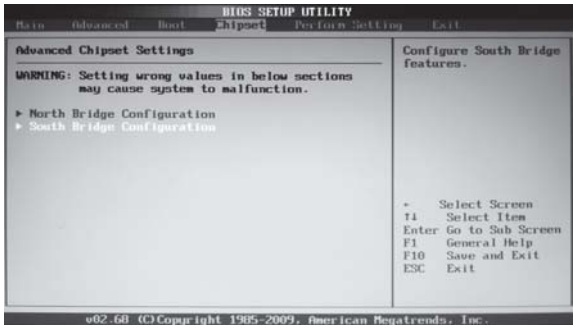
2. WiFi Status Indicator ( )

3. HDD Status Indicator ( )

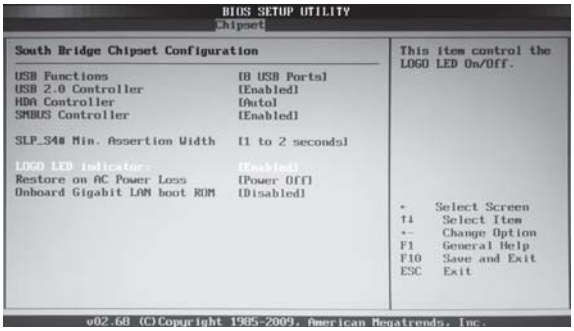
4. Power On/Off Indicator ( )

How to disable the blue ring LED indicator

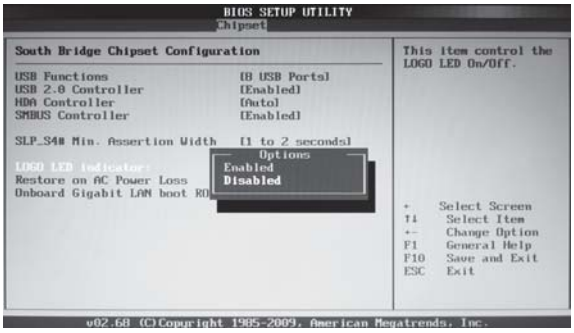
1. Turn on the ZBOX Blu-ray mini-PC, then press <Delete> to enter the BIOS SETUP UTILITY.
2. Use the arrow keys to navigate to the **Chipset** menu and select **South Bridge Configuration**.


BIOS SETUP UTILITY
Main Advanced Boot Chipset Perform Setting Exit
Advanced Chipset Settings
WARNING: Setting wrong values in below sections may cause system to malfunction.
North Bridge Configuration
South Bridge Configuration
Configure South Bridge features.
Select Screen
Select Item
Enter Go to Sub Screen
F1 General Help
F10 Save and Exit
ESC Exit
v02.68 (C)Copyright 1985-2009, American Megatrends, Inc.

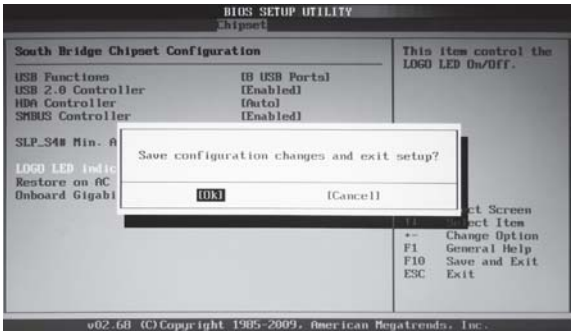
3. Press <Enter> to display the **South Bridge Chipset Configuration** and navigate to ***LOGO LED indicator***.


BIOS SETUP UTILITY
Chipset
South Bridge Chipset Configuration
USB Functions [8 USB Ports]
USB 2.0 Controller [Enabled]
HDA Controller [Auto]
SMBUS Controller [Enabled]
SLP_S4# Min. Assertion Width [1 to 2 seconds]
LOGO LED Indicator: [Enabled]
Restore on AC Power Loss [Power Off]
Onboard Gigabit LAN boot ROM [Disabled]
This item control the LOGO LED On/Off.
+ Select Screen
↑↓ Select Item
+- Change Option
F1 General Help
F10 Save and Exit
ESC Exit
v02.68 (C)Copyright 1985-2009, American Megatrends, Inc.

4. Press <Enter> and select **Disabled**.



5. Press F10 to save the configuration and exit. The PC will reboot.



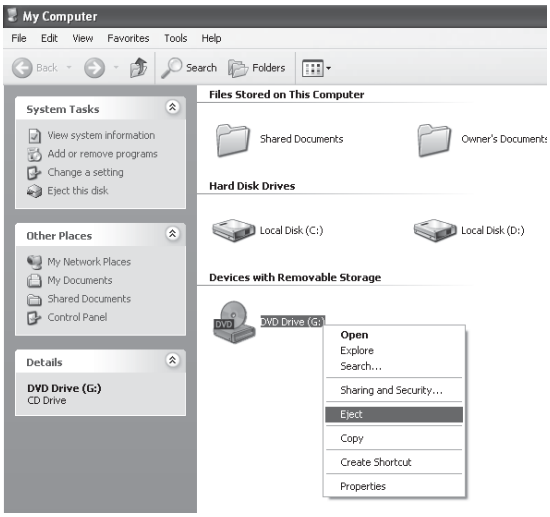
Blu-ray disc

The ZOTAC ZBOX Blu-ray features a Blu-ray combo drive that can read Blu-ray discs, and read/write DVDs and CDs.

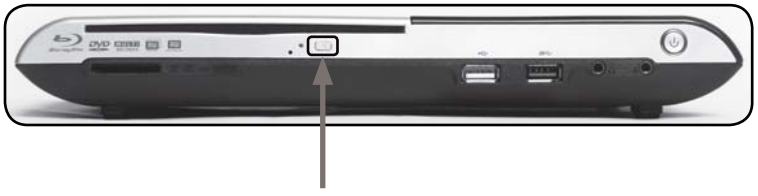
Ejecting a disc

There are two ways to get the disk to eject.

1. Right-click on the **Blu-ray Drive** in **My Computer** and left-click on **Eject**.



2. Press the eject button.



Eject Button

Setting the region code for Blu-ray movie playback

The region code does not need to be set manually. The Blu-ray drive will recognise the region code from the first Blu-ray movie inserted into the drive. The drive can change region codes up to 5 times. Once the region code has changed 5 times, it will lock to the last detected region.

Customizing the ZOTAC ZBOX Blu-ray

Please follow the instructions below to remove the cover of the ZOTAC ZBOX Blu-ray before customizing.

1. Remove the 6 screws securing the bottom cover into place.

2. Gently remove the cover as shown on the image below.

Removing a memory module

1. Locate the SO-DIMM memory slot and gently press the two arms securing the memory module outwards, as shown in the image below, to release the memory module.

2. Remove the memory module from the slot at a 45-degree angle.

Installing a memory module

1. Locate the SO-DIMM memory slots and insert a SO-DIMM memory module into the slot at a 45 degree angle.

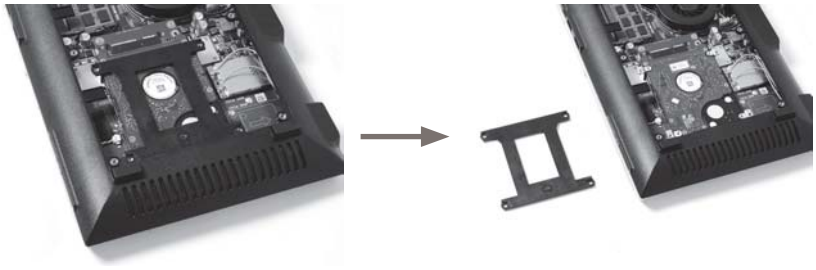
Note: When installing two SO-DIMM memory modules, please insert a module into the lower slot first.

2. Gently press down on the memory module until it locks into place by the arms of the memory slot.

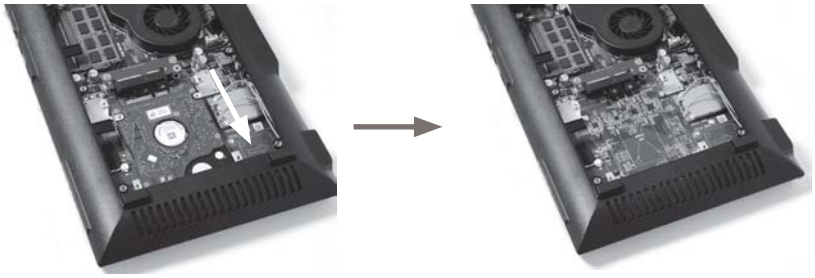
Note: This ZOTAC ZBOX Blu-ray accomodates two DDR3 SO-DIMM memory modules. You must install at least one module in one of the two slots.

Removing a hard disk

1. Locate the hard disk bracket, remove the 4 screws, and remove the cover as shown in the image below.

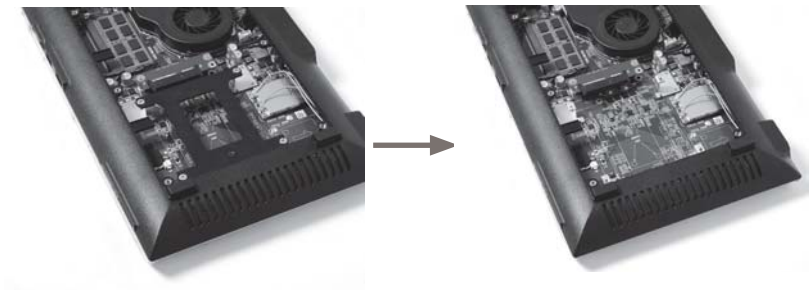


2. Gently slide the hard disk away from the connector and remove the hard disk.



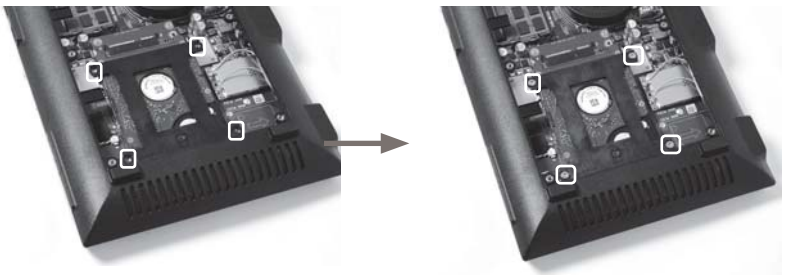
Installing a hard disk

1. Locate the hard disk bracket, remove the 4 screws, and remove the hard disk cover as shown in the image below.



2. Insert a 2.5-inch SATA hard disk into the socket and gently slide into the connector.

3. Reinstall the cover and screws.



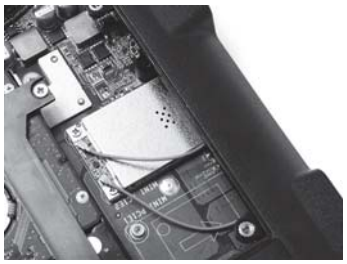
Note: Due to the 9.5mm-height limit of the hard disk, 12.5mm height drives are not supported by the ZOTAC ZBOX Blu-ray.

Installing a Mini-PCIe card

1. Locate the Mini-PCIe slot and insert a Mini-PCIe card into the slot at a 45 degree angle.

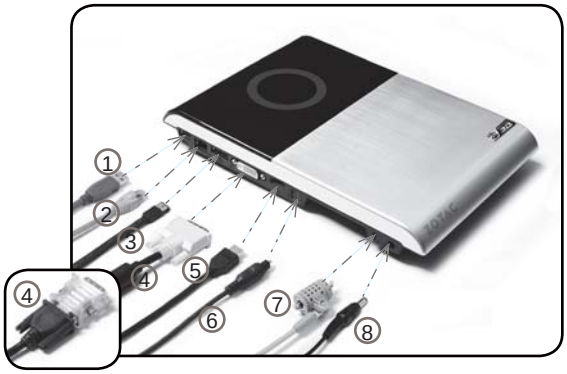
2. Gently press down on the Mini-PCIe card with one finger and secure the screws.

3. Connect the WiFi wires to the Mini-PCIe card.



Setting up the ZOTAC ZBOX Blu-ray

Please connect the peripherals before using the ZOTAC ZBOX Blu-ray.



1. **Connecting to USB 3.0 device**
   Connect USB 3.0 devices such as external hard drives, SSDs and flash drives to the USB 3.0 port on the system rear panel.
2. **Connecting to a home network**
   Connect one end of a network cable to the LAN port on the system rear panel and the other end to a network hub, switch or router.
3. **Connecting to an eSATA or USB device**
   Connect one end of an eSATA device or USB 2.0 device to the combo eSATA / USB 2.0 port.
4. **Connecting to a DVI or VGA display**
   Connect one end of a DVI/VGA cable to an HDTV or monitor, and the other end to the DVI port on the system rear panel. If using a VGA connection, please use included DVI-to-VGA adapter.
5. **Connecting to an HDMI display**
   Connect one end of an HDMI cable to the HDMI port on the system rear panel and the other end to a HDMI-compatible display such as an HDTV or monitor
6. **Connecting to an optical S/PDIF device**
   Connect the S/PDIF output from the ZBOX Blu-ray to a S/PDIF input device such as a home theater receiver or digital speakers for digital audio transfer.
7. **Connecting to a Kensington safety lock**
   Connect Kensington Safety Lock to ZBOX Blu-ray and lock.
8. **Turning on the system**
   Connect the supplied AC adapter to the DC IN jack on the system rear panel and then press the power switch on the front panel to turn on the system.
   Note: When your ZOTAC ZBOX Blu-ray is not in use, unplug the power adapter or switch off the AC outlet to conserve power.

Positioning the ZOTAC ZBOX Blu-ray

- Do not cover or block the ventilation holes on ZOTAC ZBOX Blu-ray. To ensure proper operation and reliability, leave aproximately 4 inches (10 cm) of spacing in front of the ventilation holes.
- ZOTAC ZBOX Blu-ray mini-PC systems provide ample expansion in a miniature form factor, please use connectors and cables that are appropriate in size to avoid interference.

Mounting the ZOTAC ZBOX Blu-ray to a wall

The ZOTAC ZBOX Blu-ray is wall-mountable using the included VESA mount.

1. Secure the VESA mount to the wall using screws (not included).
   Note 1: Always secure the VESA mount to a stud or solid wood surface or use anchors.
   Note 2: Do not use the included screws for wall mounting.
   Disclaimer: ZOTAC cannot be held liable for damages resulting from an improper installation.

2. Align the ZOTAC ZBOX mounting holes to the VESA mount attachment pegs. Attach the ZOTAC ZBOX to the VESA mount and gently press down to secure the ZBOX to the mount.

3. Connect the ZOTAC ZBOX Blu-ray to your monitor or TV with a HDMI/DVI-I/ VGA cable.

Note: The ZOTAC ZBOX Blu-ray mount is VESA75/100 compliant.

Installing drivers and software

Installing an operating system

The ZOTAC ZBOX Blu-ray does not ship with an operating system preinstalled. An operating system must be installed before the ZOTAC ZBOX Blu-ray can be used. The following operating systems are supported:

- Windows® XP
- Windows® Vista
- Windows® 7

Follow the instructions below to install an operating system:

1. Insert disk for operating system into the optical drive.
2. Wait for the ZOTAC ZBOX Blu-ray to boot from the disk.
3. Follow the onscreen directions to install the operating system.
4. Install system drivers to gain full functionality of the ZOTAC ZBOX Blu-ray hardware and features.

Installing system drivers

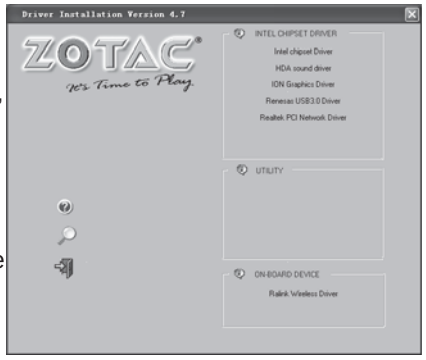
Before you can use the full features of the ZOTAC ZBOX Blu-ray, the system drivers must be installed. The following types of operating systems are supported by the ZOTAC ZBOX Blu-ray driver CD:

- Windows® XP
- Windows® Vista
- Windows® 7

Follow the instructions below to install the system drivers:

1. Insert the ZOTAC ZBOX Blu-ray driver CD. If autorun is enabled, the driver installation main menu will show up automatically. Windows Vista may ask for further confirmation, please click “Allow” or “OK” to proceed.

   Note: If autorun is disabled, you can click the file Launch.EXE to bring up the driver installation main menu.



2. The following drivers are available on the CD:
   - Intel chipset Driver
   - HDA sound Driver
   - ION Graphics Driver
   - Renesas (NEC) USB 3.0 Driver
   - Realtek Network Driver

• Ralink (AzureWave) Wireless driver

Note: Each driver must be installed individually to ensure proper operation of the ZOTAC ZBOX Blu-ray.

3. Select the driver you want to install. The driver installer should launch.
4. Follow the onscreen instructions for the selected driver to install.
5. Restart the system.

Using your ZOTAC ZBOX Blu-ray

Configuring wireless connection

Please follow the instructions below to connect to a wireless network:

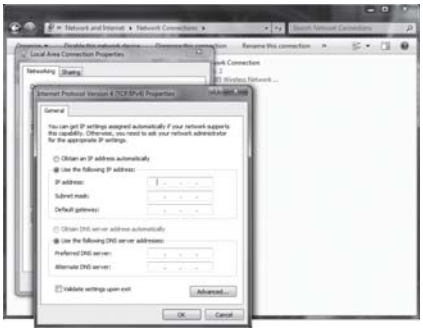
1. Double-click the crossed wireless network icon (pic) in the notification area.
2. Select the wireless network you want to connect to from the list and click Connect.
3. After connection was established, you will see “Connected”.

Note 1: For security concerns, Do NOT connect to an unsecured network, otherwise, the transmitted information without encryption might be visible to others.

Note 2: Enter the network security key if necessary.

Configuring wired connection

Using a static IP



1. Right-click the network icon in the notification area and select “Open Network Connections”.
2. Right-click “Local Area Connection” and select “Properties”.
3. Highlight “Internet Protocol (TCP/IP)” and click “Properties”.
4. Select “Use the following IP address”.
5. Enter your IP address, subnet mask and Default gateway.
6. Enter the preferred DNS server address if necessary.
7. After entering all of the related values, click “OK” to finish the configuration.

Using a dynamic IP (PPPoE connection)

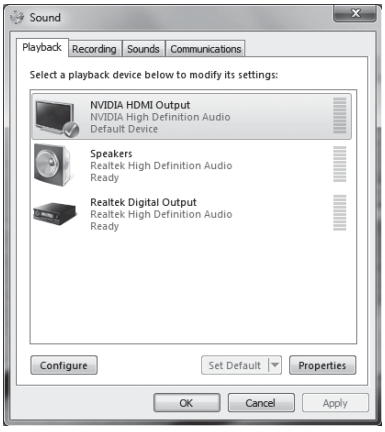
1. Repeat Step 1-3 in the previous section.
2. Select “Obtain an IP address automatically” and click “OK”.
3. Click “Create a new connection” to start the NEW Connection Wizard.
4. Click “Next”.
5. Select “Connect to the Internet” and click “Next”.
6. Select “Set up my connection manually”.
7. Select your connection type and click “Next”.
8. Enter your ISP Name and click “Next”.
9. Enter your User name and Password. Click “Next”.
10. Click “Finish” to finish the configuration.
11. Enter your user name and password. Click “Connect” to connect to the internet.

Note: Contact your internet Service Provider (ISP) if you have problems connecting to the network.

Configuring audio output via an HDMI device

Follow the steps below to enable audio output via HDMI when connecting the ZOTAC ZBOX Blu-ray to a TV or receiver via HDMI.

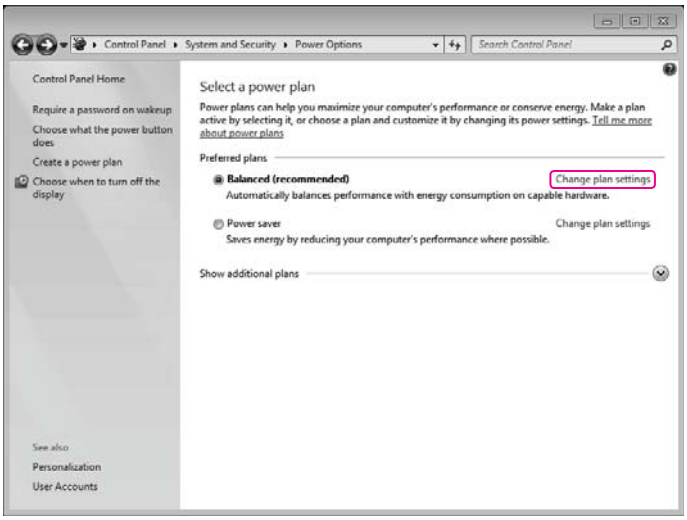
1. Access the Sound settings via the system Control Panel.
2. Under Playback devices, click “NVIDIA HDMI Output”.
3. Click the “Set as Default” in the lower right hand corner.
4. Click “OK” to exit the setup.



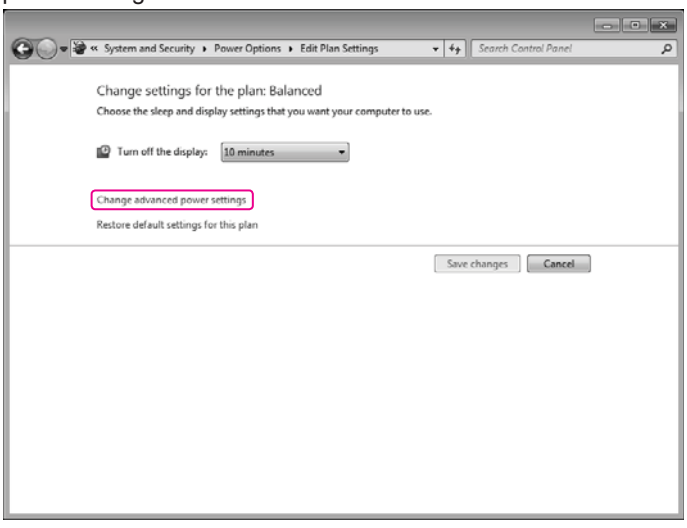
Configuring the PCIe link state power management

Follow the steps below to configure PCIe link state power management to get maximum USB 3.0 speed.

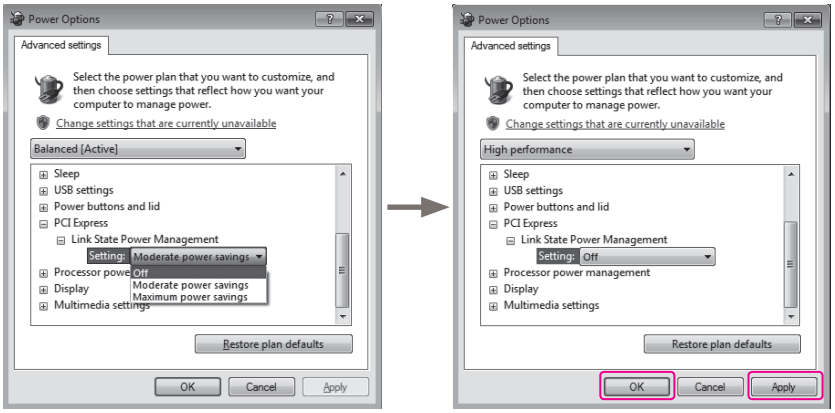
1. Enter “Control Panel > System and Security > Power Options”, and select “Change plan settings” (Balanced (recommended)).


Control Panel ▸ System and Security ▸ Power Options
Search Control Panel
Control Panel Home
Require a password on wakeup
Choose what the power button does
Create a power plan
Choose when to turn off the display
Select a power plan
Power plans can help you maximize your computer's performance or conserve energy. Make a plan active by selecting it, or choose a plan and customize it by changing its power settings. Tell me more about power plans
Preferred plans
Balanced (recommended)
Change plan settings
Automatically balances performance with energy consumption on capable hardware.
Power saver
Change plan settings
Saves energy by reducing your computer's performance where possible.
Show additional plans
See also
Personalization
User Accounts

2. In “Change settings for the plan: Balanced” menu, click “Change advanced power settings”.


« System and Security ▸ Power Options ▸ Edit Plan Settings
Search Control Panel
Change settings for the plan: Balanced
Choose the sleep and display settings that you want your computer to use.
Turn off the display:
10 minutes
Change advanced power settings
Restore default settings for this plan
Save changes
Cancel

3. In “Advanced settings” window, select “PCI Express > Link State Power Management”, change Setting “Moderate power savings” to “Off”, and click “Apply” and “OK” to finish the configuration.



Note 1: We recommended users to keep the default settings for normal operation.

Note 2: The screenshots shown in this section are for the Windows® 7 operating system.

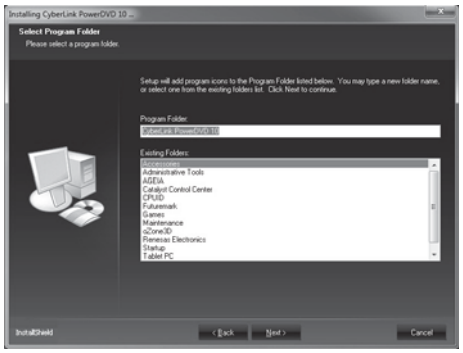
Installing the PowerDVD for 3D movie

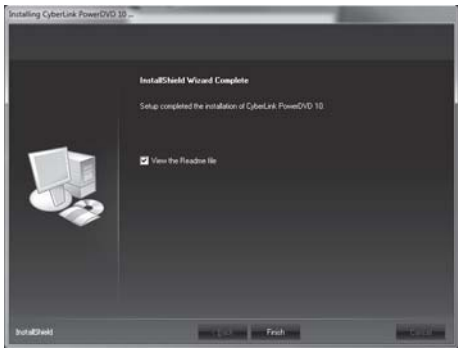
The PowerDVD supports 3D movie. Follow the steps below to install PowerDVD.

1. Insert the driver: PDVD10 into the drive, and then click **Run Setup.exe** when the following interface displays.

AutoPlay
DVD RW Drive (E:) PDVD10
Always do this for software and games:
Install or run program from your media
Run Setup.exe
Published by CyberLink
General options
Open folder to view files
using Windows Explorer
View more AutoPlay options in Control Panel

2. Install PowerDVD.





3. Right-click on the windows, and select **NVIDIA Control Panel** > **Stereoscopic 3D** > **Set up stereoscopic 3D**.
4. Enable stereoscopic 3D as shown in the image below.

Note: Please visit www.nvidia.com to search Supported 3D TVs.